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(21) International Application Number: PCT/US96/04561 (22) International Filing Date: 3 April 1996 (03.04.96) (30) Priority Data: 08/421,155 7 April 1995 (07.04.95) US (71) Applicant: BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM [US/US]; 201 West 7th Street, Austin, TX 78701 (US). (72) Inventors: JOHNSTON, Stephen, A.; 10519 Les Jardin, Dallas, TX 75229 (US). BARRY, Michael, A.; 2011 Milam Circle, Carrollton, TX 75006 (US). LAI, Wayne, C.; 6 Collins Court, Richardson, TX 75081 (US). (74) Agent: KITCHELL, Barbara, S.; Arnold, White & Durkee, P.O. Box 4433, Houston, TX 77210 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: EXPRESSION LIBRARY IMMUNIZATION (57) Abstract A general method for vaccinating against any pathogen is presented. The method utilizes expression library immunization, where an animal is inoculated with an expression library constructed from fragmented genomic DNA of the pathogen. All potential epitopes of the pathogen's proteins are encoded in its DNA, and genetic immunization is used to directly introduce one or more expression library clones to the immune system, producing an immune response to the encoded protein. Inoculation of expression libraries representing portions of the <i>Mycoplasma pulmonis</i> genome, was shown to protect mice from subsequent challenge by this natural pathogen. Protection against <i>Listeria</i> was also obtained using the method.		